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PATENT ABSTRACTS OF JAPAN

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(54) FUEL CELL SEPARATOR AND MANUFACTURING METHOD

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a fuel cell separator capable of significantly reducing the amount of discarded fuel cell separators, and its manufacturing method.

SOLUTION: The fuel cell separator containing conductive component and resin and being compared with that made from new material is obtained by milling the waste of the fuel cell separator containing the conductive component and the resin to form powders, adding resin to form powder material, molding the powder material in a mold by pressurization and heating. Also, the fuel cell separator is capable of reducing the waste and preventing an environmental pollution. When the waste of the fuel cell separator is plasticized at 500-3000° C, the resin powder contained therein can be carbonized or graphitized; and the raw material with uniformed conductive component can be used.

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3. In the drawings, any words are not translated.

CLAIMS

[Claim(s)]

[Claim 1] The fuel cell separator characterized by a part of above-mentioned conductive component [at least] consisting of an ingredient which ground the trash of a fuel cell separator in the shape of powder in the fuel cell separator containing a conductive component and resin.

[Claim 2] The fuel cell separator according to claim 1 with which the trash of the above-mentioned fuel cell separator is characterized by making the pitch carbonize or graphitize.

[Claim 3] The manufacture approach of the fuel cell separator which grinds the trash of the fuel cell separator containing a conductive component and resin etc. in the shape of powder, supplements the trash of the shape of this powder with an intact conductive component and/or resin, considers as a powdered raw material, and is characterized by pressurizing and heating this powdered raw material, and fabricating it within metal mold.

[Claim 4] The manufacture approach of the fuel cell separator according to claim 3 characterized by the above-mentioned resinous principle to fill up being 2.4 – 40 % of the weight.

[Claim 5] The manufacture approach of the fuel cell separator according to claim 3 or 4 characterized by adding to either the process which calcinates the trash of the above-mentioned fuel cell separator at 500–3000 degrees C before and after the process which grinds the trash of the fuel cell separator containing a conductive component and resin etc. in the shape of powder.

[Translation done.]
